jc644 U.S. PTO 10/05/99

Please type a plus sign (+) inside this box → [X]

PTO/SB/05 (4/98)
Approved for use through 09/30/2000. OMB 0651-0032
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 C.F.R. § 1.53(b))

Attorney Docket No.	R0027
First Inventor or Application Identifier	BRITTON
Title	PROVIDING AUDIENCE FLOW IN A PERSONAL TELEVIS
Express Mail Label No.	

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO: **Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231**

jc678 U.S. PTO 09/412993 10/05/99

1. [X] * Fee Transmittal Form *(e.g., PTO/SB/17)* *(Submit an original and a duplicate for fee processing)*
2. [X] Specification [*Total Pages* 21] *(preferred arrangement set forth below)*
   - Descriptive title of the Invention
   - Cross References to Related Applications
   - Statement Regarding Fed sponsored R & D
   - Reference to Microfiche Appendix
   - Background of the Invention
   - Brief Summary of the Invention
   - Brief Description of the Drawings *(if filed)*
   - Detailed Description
   - Claim(s)
   - Abstract of the Disclosure
3. [X] Drawing(s) *(35 U.S.C. 113)* [*Total Sheets* 6]
4. Oath or Declaration [*Total Pages*]
   - a. [X] Newly executed (original or copy)
   - b. [ ] Copy from a prior application (37 C.F.R. § 1.63(d)) *(for continuation/divisional with Box 16 completed)*
     - i. [ ] DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).

** NOTE FOR ITEMS 1 & 13: IN ORDER TO BE ENTITLED TO PAY SMALL ENTITY FEES, A SMALL ENTITY STATEMENT IS REQUIRED (37 C.F.R. § 1.27), EXCEPT IF ONE FILED IN A PRIOR APPLICATION IS RELIED UPON (37 C.F.R. § 1.28).*

5. [ ] Microfiche Computer Program *(Appendix)*
6. Nucleotide and/or Amino Acid Sequence Submission *(if applicable, all necessary)*
   - a. [ ] Computer Readable Copy
   - b. [ ] Paper Copy (identical to computer copy)
   - c. [ ] Statement verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

7. [X] Assignment Papers (cover sheet & document(s))
8. [ ] 37 C.F.R.§3.73(b) Statement *(when there is an assignee)* [ ] Power of Attorney
9. [ ] English Translation Document *(if applicable)*
10. [ ] Information Disclosure Statement (IDS)/PTO-1449 [ ] Copies of IDS Citations
11. [ ] Preliminary Amendment
12. [ ] Return Receipt Postcard (MPEP 503) *(Should be specifically itemized)*
13. [ ] * Small Entity Statement(s) *(PTO/SB/09-12)* [ ] Statement filed in prior application, Status still proper and desired
14. [ ] Certified Copy of Priority Document(s) *(if foreign priority is claimed)*
15. [ ] Other: .....

The PTO did not receive the following listed item(s) Check $ 10 Assignment

16. **If a CONTINUING APPLICATION,** *check appropriate box, and supply the requisite information below and in a preliminary amendment:*

[ ] Continuation [ ] Divisional [ ] Continuation-in-part (CIP) of prior application No: ____/____

Prior application information: *Examiner* _____ *Group / Art Unit:* _____

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 4b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

17. CORRESPONDENCE ADDRESS

[ ] *Customer Number or Bar Code Label* *(Insert Customer No. or Attach bar code label here)* or [X] *Correspondence address below*

Name	David Halvorson Replay Networks, Inc.				
Address	1945 Charleston Road				
City	Mtn. View	*State*	CA	*Zip Code*	94043-1201
Country	USA	*Telephone*	650-210-1173	*Fax*	650-691-0158

Name (Print/Type)	David Halvorson	*Registration No. (Attorney/Agent)*	33,395
Signature		*Date*	10/5/99

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

Docket Number: R#0027

UNITED STATES PATENT APPLICATION

FOR

PROVIDING AUDIENCE FLOW IN A PERSONAL TELEVISION DEVICE

Inventor(s):

Layne Britton

BACKGROUND OF THE INVENTION

Audience flow is a term used in television broadcasting to refer to the carry over of an audience from one program to the next. Audience flow is used by networks to promote new shows (by scheduling a new show to follow a highly rated show in order to provide exposure to the new show); to attempt to increase ratings of one show by having it follow a highly rated show; to maintain an audience by running a series of similar shows during a time period (sometimes referred to as "block programming"), etc.

According to one report (see, "The future: Everything you know about media will change radically", The Meyers Group, 1998, hereinafter the "Meyers Group Report"), broadcast television's ratings (based on 24 hour audience share) is eroding from an 82% level in 1975 to an estimated 28% level in 2005. This report suggests that the erosion is due to the increased number of channels that are available to the viewer with the advent of cable and satellite television. According to the increased number of channels and amount of programming available leads to increased levels of "channel surfing" and less control over the audience by the broadcasters. As stated by the report:

> "The television season, audience "flow" and network exclusivity are outdated concepts. The are vestiges of 30-year-old network programming strategies that are no longer relevant. . ."

And, the report concludes by stating:

> "To remain competitive, networks must develop innovative yearlong and multinetwork original programming strategies. They must adapt to the reality that every half-hour, every night, every program has its own set of coordinates on the television map."

These conclusions were reached even before the market launch of the so-called personal television. Personal television, such as the Replay TV 2001, 2003 and 2004 personal television devices, allow a viewer to easily time-shift programming by selecting programming to be recorded for later viewing. Thus, a viewer may select to record all episodes of "Home Improvement", all episodes of "Star Trek", all political commentary programming, and all programming regarding cooking shows. The selected programming is recorded and may be viewed in any order or sequence desired by the viewer. Thus, these personal television devices may further disrupt audience flow.

Many broadcasters would prefer to be able to continue to benefit from audience flow.

Thus, what is needed is a method to provide for audience flow even with the advent of new technologies such as personal television.

SUMMARY OF THE INVENTION

A method and apparatus for encouraging audience flow in which a user selects a program for recording. In addition to recording the selected program, the recording device records an additional program. In certain embodiments, the additional program may be the program that is broadcast immediately following the requested program. In other embodiments, the two programs may be linked (for example, by linking codes in a program guide).

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is an overall network diagram of a network as may implement an embodiment of the present invention.

Figure 2 is a high level block diagram of a recording and playback device as may be implemented by an embodiment of the present invention.

Figure 3 is an illustration of a video sequence including a first program, a second program and a commercial pod.

Figure 4 is an illustration of a programming guide database as may be utilized by an embodiment of the present invention.

Figure 5 is an illustration of a user interface useful for program previewing and selection as may be utilized by an embodiment of the present invention.

Figure 6 is an overall flow diagram of a method for recording and playback of programming as may be implemented by an embodiment of the present invention.

For ease of reference, it might be pointed out that reference numerals in all of the accompanying drawings typically are in the form "drawing number" followed by two digits, xx; for example, reference numerals on Figure 1 may be numbered 1xx; on Figure 3, reference numerals may be numbered 3xx. In certain cases, a reference numeral may be introduced on one drawing and the same reference numeral may be utilized on other drawings to refer to the same item.

DETAILED DESCRIPTION OF THE EMBODIMENTS THE PRESENT INVENTION

Video Tape Recorders and Personal Television

The described invention has application in video playback devices such as conventional video tape recorders (VTRs) as well as emerging Personal Television (PTV) devices. Embodiments of a commercially available PTV are available as the Replay TV 2001, 2003 and 2004 personal television devices.

Embodiments of personal television devices are further described in co-pending U.S. Patent Applications:

Serial No.: 09/130,994 filed August 7, 1998 titled "Video Data Recorder with Integrated Channel Guides";

Serial No.: 09/131,092 filed August 7, 1998 titled "Video Data Recorder for Recording Predefined Format Shows";

Serial No.: 09/131,091 filed August 7, 1998 titled "Video Data Recorder with Personal Channels"; and

Serial No.: 09/262,144 filed March 3, 1999 titled "Digital Recording and Playback" which is a continuation of U.S. Patent Application Serial No.: 09/132,690 filed August 11, 1998;

all of which are incorporated herein by reference.

Figure 1 provides a high level illustration of a network as may implement the present invention. The illustrated network comprises a display device 102. In the described embodiment the display device 102 is a television; however, in alternative embodiments, the display device 102 may another type of device such as a monitor. The display device 102 is coupled to receive television programming conventionally such as over-the-air (as illustrated by use of the receiving antenna 103 and transmitting antenna 112), over a cable television system, or over a satellite television system (or all or any combination of these.)

A recording and playback device 104 is coupled with the television and is also coupled to receive the television signal. The recording and playback device is shown in high-level block diagram form in Figure 2. Figure 2 will be described in greater detail below.

Turning back to Figure 1, the recording and playback device 104 is coupled in communication with a server 108. In the described embodiment, the coupling is through a network 106. The recording and playback device 104 is coupled by telephonic connection to the network 106 and the server is likewise coupled by telephonic connection to the network 106. The network 106 may be the internet or some other distributed network. Other couplings between the server 108 and the network may be utilized. For example, a wireless connection may be utilized or a connection through a cable plant may be utilized.

In any event, the server 106 is coupled in communication with the recording and playback device 104 so that the server 106 may provide updated information to the recording and playback device 104. The updated information may include information on television programs to be broadcast on bandwidth 112. Some of the television program information that may be broadcast will be described in greater detail with reference to Figure 4. As will be described, the television program information may, in certain embodiments, include linking information 404 and 405 for linking of one program to another program.

Overview of the Recording / Playback device 104

Figure 2 provides a high level block diagram overview of a recording and playback device as may be utilized by an embodiment of the present invention.

As is illustrated, the described embodiment comprises a processor 202 that provides for overall control of the operation of the device 104. The processor may be any of a number of commercially available processors or may be a special purpose processor.

Required programming to control the processor, as well video sequences (e.g., recorded television programs) may be recorded on recording media 203. In the described embodiment, recording media 203 is a disk drive

but in other embodiments may be another type of recording device and in certain embodiments more than one recording device may be utilized.

The device 104 further comprises input and output connections 204-207 allowing for communication between the device 104 and the display device 102, the antenna and/or other program source (e.g., cable, satellite) 103, the server 108 (such as over a telephonic connection to a network 106 as illustrated) and to a user input/output device such as a remote or keyboard.

It should be noted that certain details are omitted from Figure 2 such as read-only memory and encoders and decoders. However, such details will be apparent to one skilled in the art.

Audience Flow

Turning now to Figure 3, transmission of television programming content is illustrated, 300. Traditionally, a first program 306 is broadcast over a first set of time periods 301, 302. Following the first program 306, a commercial pod(s) 307 over one or more second time periods 303. Following the commercial pod(s) 307, a second program 308 is broadcast over third time periods 304, 305. Clearly, in certain embodiments, commercials may also be broadcast before and during the first program 306 as well as during and after the second program 308. Further, in certain embodiments, commercials pods may be eliminated altogether.

As was discussed in the background section, broadcasters design the sequence of programs in order to achieve audience flow (e.g., keep a set of viewers) from the first program 306 to the second program 308.

Recording and playback device 104 performs the function of "time shifting" – allowing viewers to record a program, such as program 306, for viewing during a time period different than the time period during which it is broadcast, time periods 301, 302. In certain embodiments, device 104 allows the viewer to select a given program (e.g., the first program 306) for time shifting and, responsive to selection of the program, that program will be recorded onto recording media 203. The viewer then plays the program at a time of the viewer's choosing. Clearly, this time shifting functionality has the capability to disrupt the broadcaster's intended audience flow between the first program 306 and the second program 308.

As has been discussed, the device 104 comprises a programmable processor 202 that operates under control of stored program(s). The program(s) may be stored on recording media 203. As has been discussed, the stored program(s) include first instructions for accepting user input selecting the first program 306 for recording, block 601.

The stored program(s) include second instructions for recording the second program 308 (and, preferably, the first program 306) responsive to the viewer request for recording the first program 306, block 603. The device 104 accepts viewer input selecting the first program for display or playback, block

605 and displays the first program 306 responsive to the viewer input, block 607. In certain embodiments, either before, during or following playback of the first program 306, a promotional for the second program 308 is displayed, block 609. The display of the promotional further promotes audience flow between the first program 306 and the second program 308. Finally, following display of the first program (and, optionally, the promotional and commercial pods), the second program is displayed, block 611.

Referring back to Figure 6, step 601, in the described embodiment, the viewer may utilize any of several methods for selection of a first program 306 for recording. For example, the viewer may select the first program using an electronic program guide that is displayed by the device 104 on display device 102. Display and use of an EPG to select programs for recording is described in greater detail in the above-referenced United States patent application Serial Number 09/130,994. The viewer may also be provided with facilities to select programming by providing functionality to search through the programming guide data based on keyword searches for actor or actress names, director names, show titles, or descriptions.

In addition, in certain embodiments, the viewer may be provided with editorial and promotional guides which allow a viewer to review information on available programming and select programming for recording. An example of an interface for such an embodiment is illustrated with reference to Figure 5 which illustrates a so-called "zone" used to promote programming. In the

particular example, movies are promoted in the personal movie zone 501 by providing a list 502 of available movies. When the viewer selects a particular movie title, a barker area 503, displays additional information on the movie. The viewer may select any particular program (movie) for recording and, in accordance with the teachings of the described embodiment, the recording device 104 will record both the selected program and a second program.

Turning back to Figure 3, in the described example, second program 308 is broadcast following first program 306 immediately in time (for purposes of this disclosure "immediately" is meant to refer to without other intervening programs, but as illustrated by Figure 3, does not preclude intervening commercials or promotionals.) However, in alternative embodiments, the second program 308 may be broadcast during a time period other than immediately following the first program 306 (either later in time or earlier in time). As is illustrated by Figure 4, in one alternative embodiment, in addition to conventional information included in the electronic program guide database 400 such as show title 401, broadcast time 402, actor and actress names, descriptive information 403, etc. the database 400 includes a link code 404 and a link to code 405 for each television program. The link code 404 is a code that other programs may use to link to that television program. The link to code 405 indicates a television program that the listed program is linked to. Thus, in the exemplary data of Figure 4, "Lassie" is linked to "My Three Sons" by including in its link to field 405 "3SONS1" which is the link code 404 for the

program "My Three Sons". Similarly, in the described database 400, "Star Trek" is linked to "My Favorite Martian" and visa versa.

Thus, using the technique of the described embodiment, if a viewer selects "Star Trek" for recording, both "Star Trek" and "My Favorite Martian" are recorded. Similarly, if a viewer selects "My Favorite Martian" for recording, "Star Trek" is also recorded. Further, when the viewer selects "Star Trek" for playback, "My Favorite Martian" is also played back.

In certain embodiments, the second show is not recorded under certain conditions. For example, certain embodiments of device 104 provide for only a single tuner. Thus, if the viewer has selected another program for recording during the same time slot as the "second show", these embodiments may opt to respect the viewer's recording wishes. Further, the device 104 may have limited capacity on the recording media 203. Thus, certain embodiments may only record the "second show" where there is adequate recording capacity for both the second show and other programming selected by the viewer.

Co-pending United States patent application Serial Number 09/131,091 describes storing time shifted programming in so-called "personal channels". The personal channels may be titled, for example, with the title of a series (e.g., "Star Trek") that has been chosen for recording. In certain embodiments, the "second program" may be stored in the personal channel for the first program. Thus, in such embodiments, the viewer may readily see,

by viewing a list of programming available in the personal channel, the additional programs that have been recorded. In other embodiments, the "second program" may be recorded in its own personal channel but still may be available for review by the viewer when reviewing a list of available personal channels. In still other embodiments, the existence of the second program on recording device 104 may be hidden from view.

Thus, what has been described is a method and apparatus encouraging audience flow.

CLAIMS

What is claimed is:

1. A method comprising:

   a) accepting first viewer input for recording a first program; and

   b) recording the first program and a second program responsive to the first viewer input.

2. The method as recited in claim 1 further comprising the steps of:

   a) accepting second viewer input to display the first program; and

   b) displaying the first program and the second program responsive to the second viewer input.

3. The method as recited by claim 2 further comprising the step of displaying a promotional for the second program prior to displaying the second program.

4. The method as recited by claim 3 wherein the promotional is displayed during the first program.

5. The method as recited by claim 3 wherein the promotional is displayed following the first program and before the second program.

6. The method as recited by claim 1 wherein the second program is broadcast immediately following the first program.

7. The method as recited by claim 1 wherein the second program is broadcast at different time than immediately following the first program.

8. The method as recited by claim 7 wherein the second program is broadcast at a later time than the first program.

9. The method as recited by claim 7 wherein the second program is broadcast at an earlier time than the first program.

10. The method as recited by claim 1 wherein the first and second programs are recorded in a personal channel.

11. The method as recited by claim 1 wherein the first program is recorded in a personal channel and the second program is recorded in a hidden channel.

12. A video playback device comprising:

a) storage means for storing programs for playback;

b) selection means for allowing selection by a viewer of a first program for recording; and

c) control means for controlling the video playback device to record a second program responsive to the viewer selection of the first program for recording.

13. The video playback device as recited by claim 12 wherein the second program is linked to the first program.

14. The video playback device as recited by claim 12 wherein the second program is broadcast immediately following the first program.

15. A video recorder comprising:

a) an input for receiving a video signal, the video signal comprising a plurality of programs;

b) a storage device for storing selected ones of the plurality of programs;

c) a processor; and

d) a stored program for controlling the processor, the stored program including first instructions for accepting user input for selection of a first program to be stored and second instructions for causing a second program to be recorded responsive to the user input.

16. The video recorder as recited by claim 15 wherein the second program is linked to the first program.

17. The video recorder as recited by claim 15 wherein the second program is broadcast immediately following the first program.

18. A method for encouraging audience flow comprising:
    a) accepting viewer input for selection of a first program for recording;
    b) recording a second program responsive to selection of the first program for recording.

19. The method as recited by claim 18 wherein the second program is linked with the first program.

20. The method as recited by claim 19 wherein the second program is broadcast before the first program.

21. The method as recited by claim 19 wherein the second program is broadcast after the first program.

22. The method as recited by claim 18 wherein the second program is broadcast immediately following the first program.

23. The method as recited by claim 18 further comprising the steps of:

a) accepting second user input requesting display of the first program;

b) displaying the first program responsive to the second user input; and

c) displaying the second program following display of the first program.

24. The method as recited by claim 18 further comprising the step of displaying a promotional message for the second program.

25. The method as recited by claim 24 wherein the promotional message is displayed before display of the first program.

26. The method as recited by claim 24 wherein the promotional message is displayed after display of the first program.

27. A method for encouraging audience flow:

a) accepting user input requesting display of first program; and

b) displaying the first program and a second program responsive to the second user input.

28. The method as recited by claim 27 further comprising the step of displaying a promotional message for the second program.

29. The method as recited by claim 28 wherein the promotional message is displayed before display of the first program.

30. The method as recited by claim 30 wherein the promotional message is displayed after display of the first program.

ABSTRACT

A method and apparatus for encouraging audience flow. In the described embodiment, a user selects a program for recording. In addition to recording the selected program, the recording device records an additional program. In certain embodiments, the additional program may be the program that is broadcast immediately following the requested program. In other embodiments, the two programs may be linked (for example, by linking codes in a program guide).

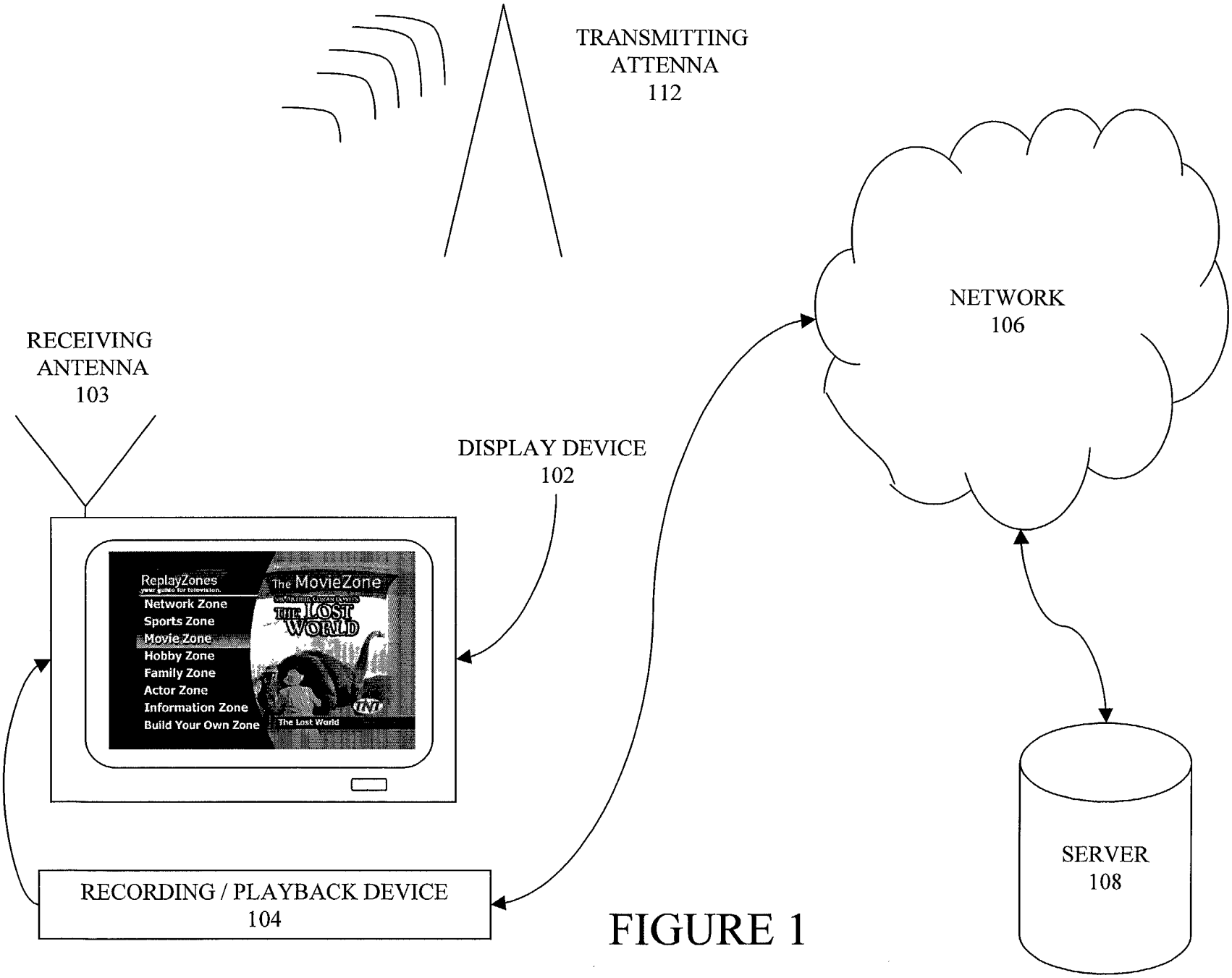

TRANSMITTING
ATTENNA
112
NETWORK
106
RECEIVING
ANTENNA
103
DISPLAY DEVICE
102
ReplayZones
Network Zone
Sports Zone
Movie Zone
Hobby Zone
Family Zone
Actor Zone
Information Zone
Build Your Own Zone
The MovieZone
THE LOST WORLD
The Lost World
SERVER
108
RECORDING / PLAYBACK DEVICE
104

FIGURE 1

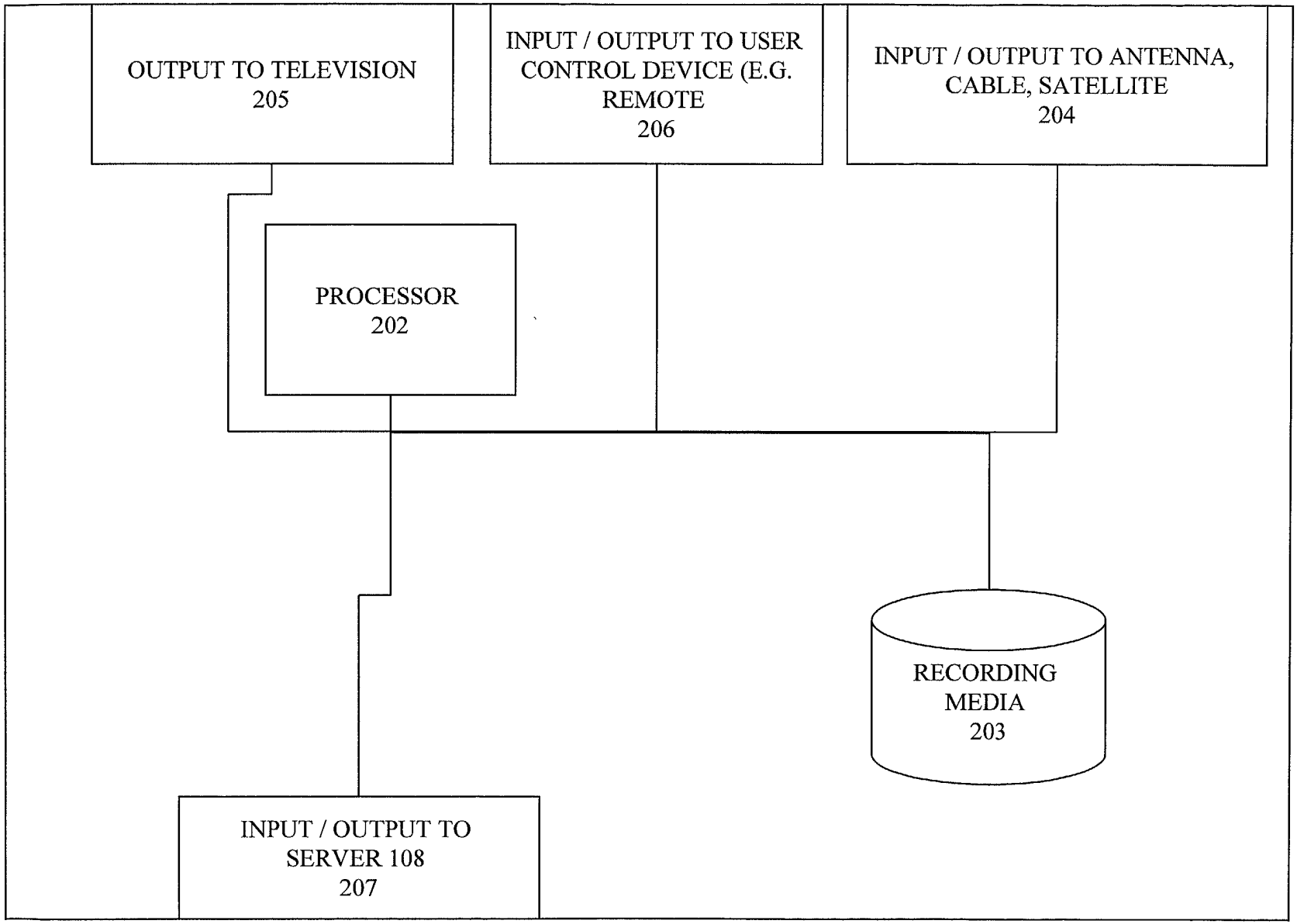

OUTPUT TO TELEVISION
205
INPUT / OUTPUT TO USER CONTROL DEVICE (E.G. REMOTE
206
INPUT / OUTPUT TO ANTENNA, CABLE, SATELLITE
204
PROCESSOR
202
RECORDING MEDIA
203
INPUT / OUTPUT TO SERVER 108
207
RECORDING / PLAYBACK DEVICE 104

FIGURE 2

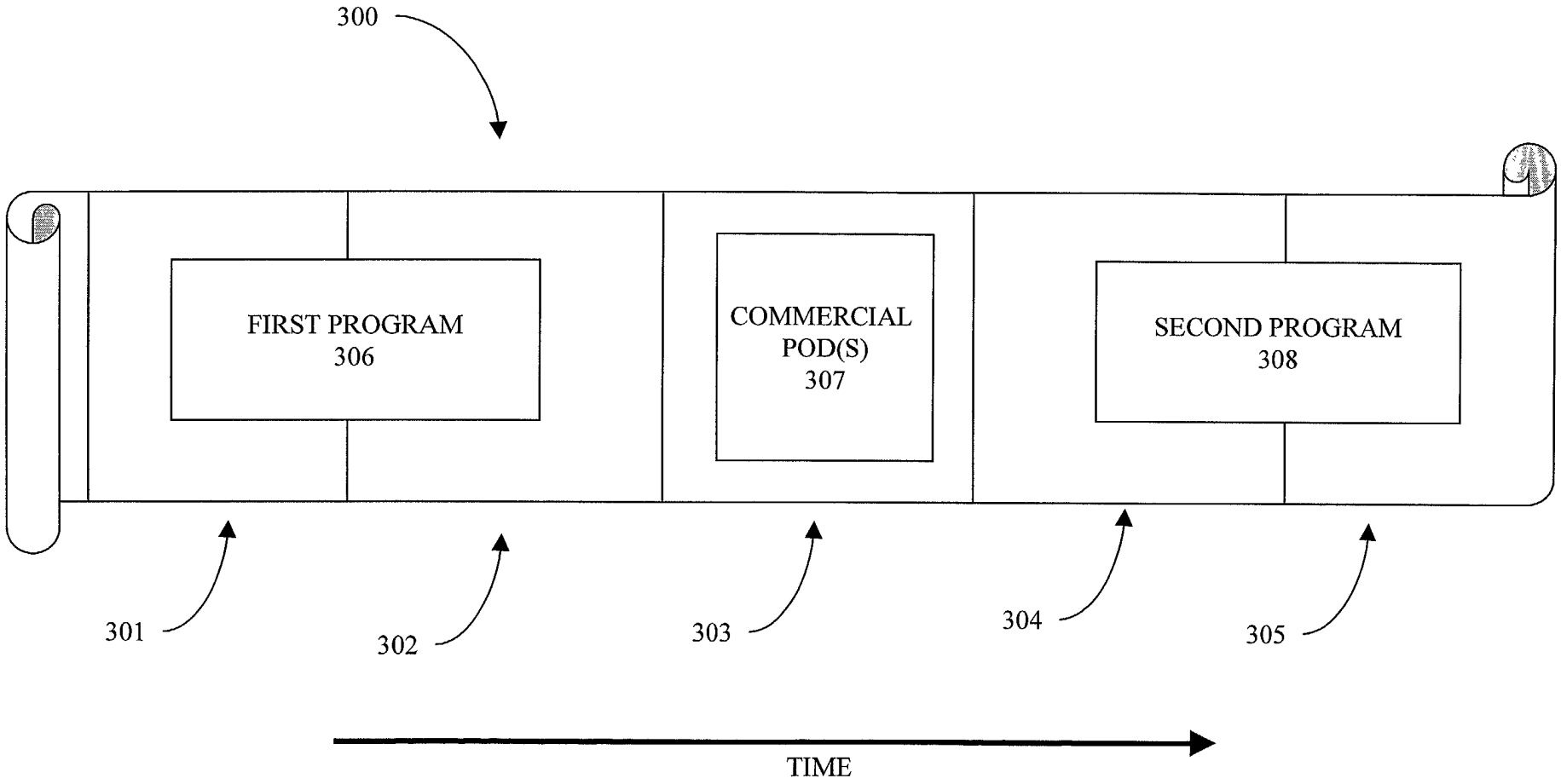
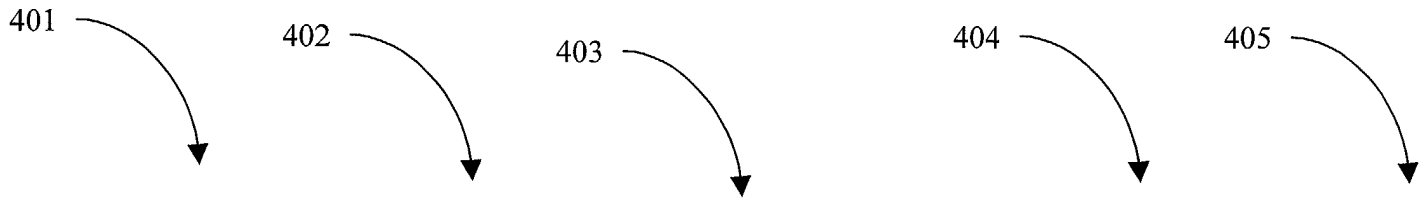

300
FIRST PROGRAM
306
COMMERCIAL
POD(S)
307
SECOND PROGRAM
308
301
302
303
304
305
TIME

FIGURE 3



PROGRAM	TIME	DESCRIPTION	LINK CODE	LINK TO
LASSIE	TUE 8:30PM	STORY ABOUT A HERO DOG NAMED LASSIE	LASSIE1	3SONS1
CAPTAIN KANGAROO	TUE 10:00 AM	CAPTAIN K TELLS KIDS STORIES AND ENTERTAINS	CAPT1	
MY THREE SONS	WED 8:00 PM	STORY ABOUT A FATHER AND THREE SONS	3SONS1	
STAR TREK	THU 9:00 PM	SPACE SHIP EXPLORES BRAVE NEW WORLDS	STREK1	MART1
MY FAVORITE MARTIAN	THU 8:30 PM	STORY ABOUT A MARTIAN DISGUISED AS A HUMAN	MART1	STREK1

FIGURE 4

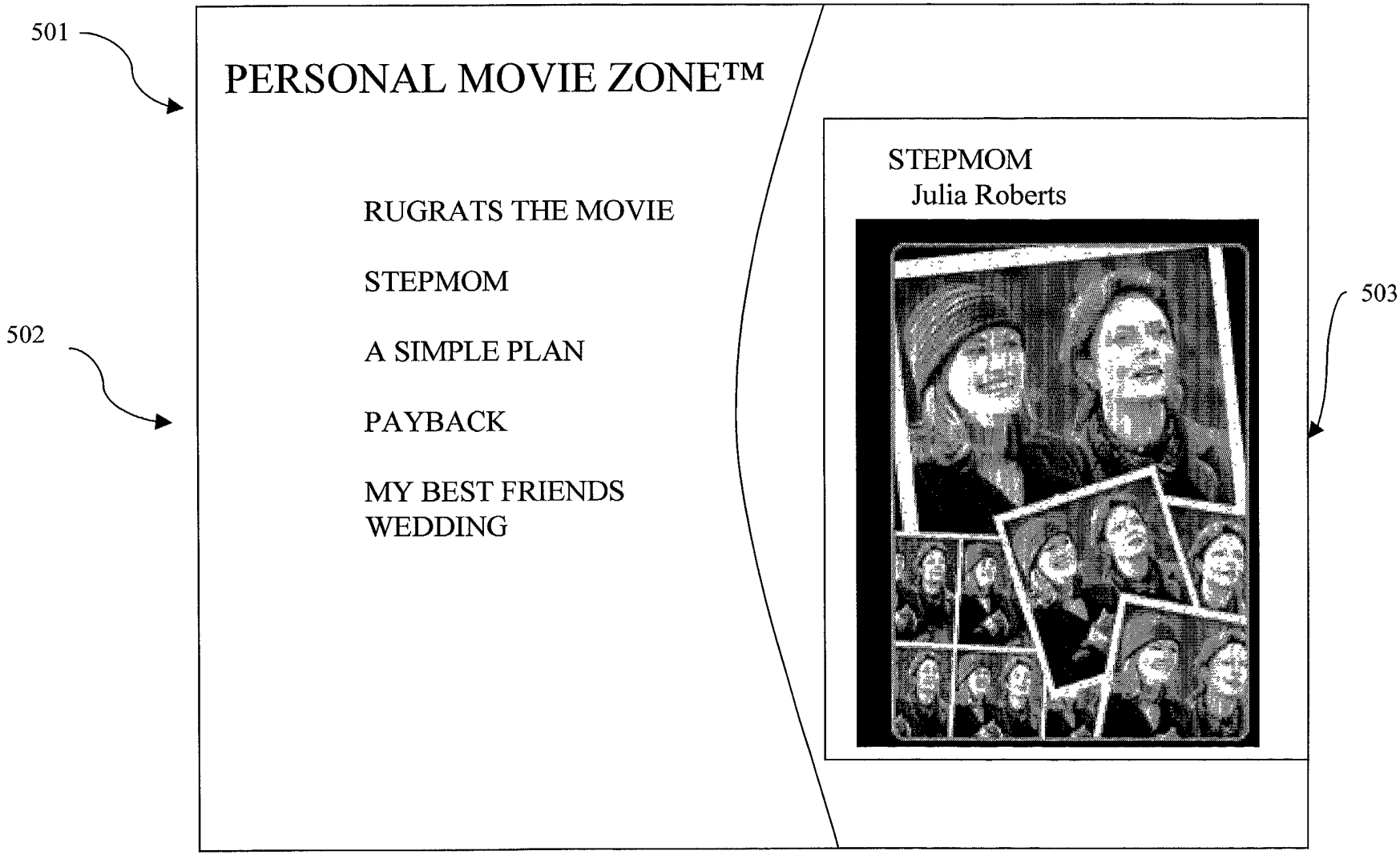

501
PERSONAL MOVIE ZONE™
RUGRATS THE MOVIE
STEPMOM
A SIMPLE PLAN
PAYBACK
MY BEST FRIENDS WEDDING
502
STEPMOM
Julia Roberts
503

FIGURE 5

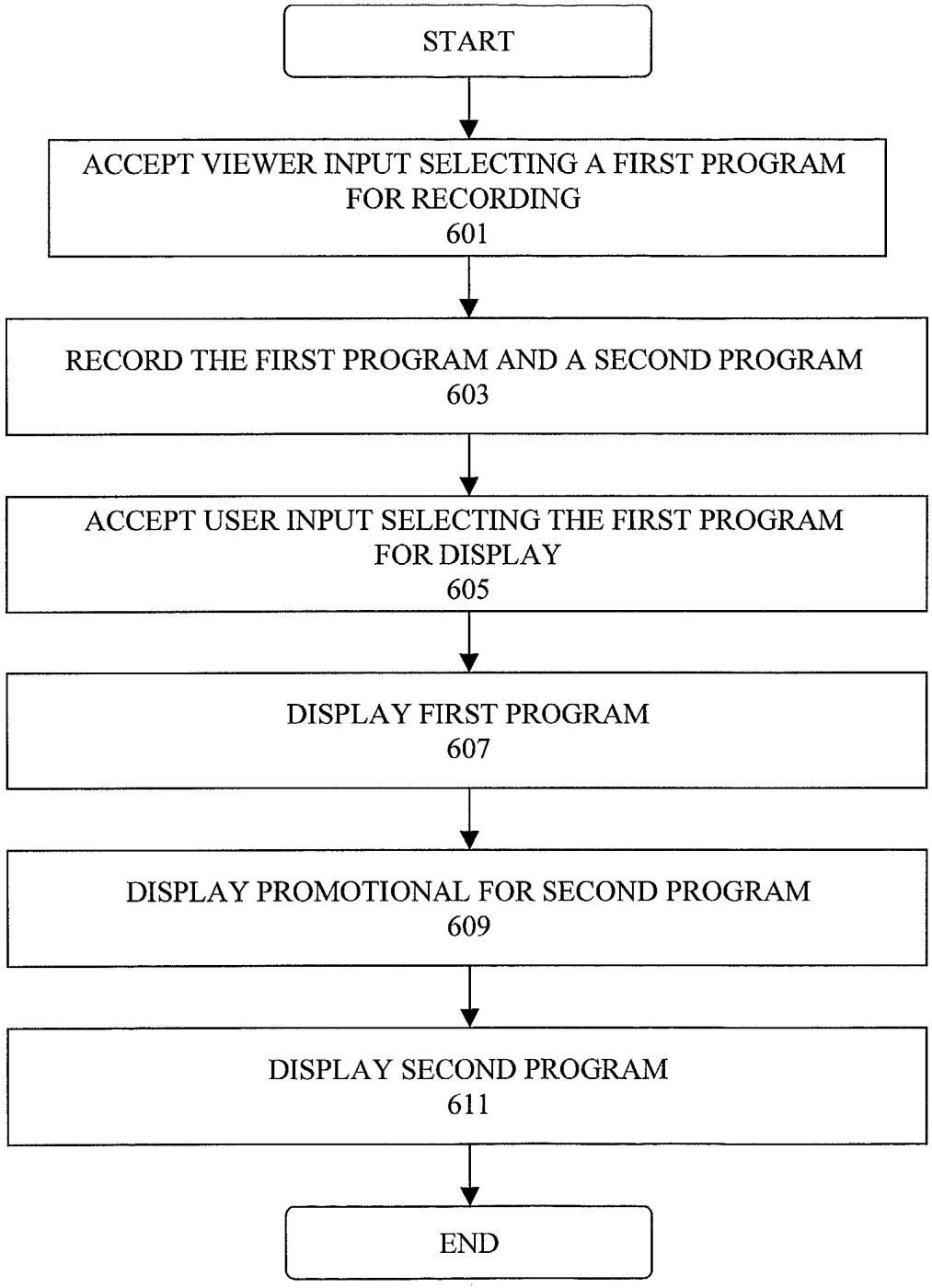

START
ACCEPT VIEWER INPUT SELECTING A FIRST PROGRAM FOR RECORDING
601
RECORD THE FIRST PROGRAM AND A SECOND PROGRAM
603
ACCEPT USER INPUT SELECTING THE FIRST PROGRAM FOR DISPLAY
605
DISPLAY FIRST PROGRAM
607
DISPLAY PROMOTIONAL FOR SECOND PROGRAM
609
DISPLAY SECOND PROGRAM
611
END

FIGURE 6

Please type a plus sign (+) inside this box → [X]

PTO/SB/01 (12-97)
Approved for use through 9/30/00. OMB 0651-0032
Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

[X] Declaration Submitted with Initial Filing OR [ ] Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)

Attorney Docket Number	R0027
First Named Inventor	BRITTON
COMPLETE IF KNOWN	
Application Number	/
Filing Date	Concurrently herewith
Group Art Unit	
Examiner Name	

As a below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

PROVIDING AUDIENCE FLOW IN A PERSONAL TELEVISION DEVICE

(Title of the Invention)

the specification of which
[X] is attached hereto
OR
[ ] was filed on (MM/DD/YYYY) [ ] as United States Application Number or PCT International Application Number [ ] and was amended on (MM/DD/YYYY) [ ] (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached? YES	NO
			[ ]	[ ]	[ ]
			[ ]	[ ]	[ ]
			[ ]	[ ]	[ ]
			[ ]	[ ]	[ ]

[ ] Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)

[ ] Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

Burden Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → [X]

PTO/SB/01 (12-97)
Approved for use through 9/30/00. OMB 0651-0032
Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

DECLARATION — Utility or Design Patent Application

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. Parent Application or PCT Parent Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number *(if applicable)*

☐ Additional U.S. or PCT international application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

As a named inventor, I hereby appoint the following registered practitioner(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: ☐ Customer Number [ ] → *Place Customer Number Bar Code Label here*

OR

[X] Registered practitioner(s) name/registration number listed below

Name	Registration Number	Name	Registration Number
David Halvorson	33,395		

☐ Additional registered practitioner(s) named on supplemental Registered Practitioner Information sheet PTO/SB/02C attached hereto.

Direct all correspondence to: ☐ Customer Number or Bar Code Label [ ] *OR* [x] Correspondence address below

Name	David Halvorson				
Address	Replay Networks, Inc.				
Address	1945 Charleston Road				
City	Mountain View	**State**	CA	**ZIP**	94043-1201
Country		**Telephone**	1-650-210-1173	**Fax**	1-650-691-0158

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name of Sole or First Inventor: ☐ A petition has been filed for this unsigned inventor

Given Name (first and middle [if any])	Family Name or Surname
Layne	Britton

Inventor's Signature						**Date**	
Residence: City	Palo Alto	**State**	CA	**Country**		**Citizenship**	USA
Post Office Address	Replay Networks, Inc.						
Post Office Address	1945 Charleston Road						
City	Mtn. View	**State**	CA	**ZIP**	94043	**Country**	

[X] Additional inventors are being named on the ____supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto